



**MISSOURI DEPARTMENT OF TRANSPORTATION
MATERIALS ENGINEERING
Jefferson City, Missouri**

**Test Method
MoDOT T50
MECHANICAL ANALYSIS OF EXTRACTED AGGREGATE
(RAPID METHOD)**

1.0 SCOPE

1.1 This method covers the procedure for determination of the particle size distribution of fine and coarse aggregates extracted from bituminous mixtures, using sieves with square openings.

2.0 APPARATUS

2.1 The apparatus required is specified in section 4 of AASHTO T30. In addition, microwave ovens and hot plates with adjustable heating rates may be used as required.

3.0 PROCEDURE

3.1 The procedure for determining the mechanical analysis of extracted aggregate shall be as specified in AASHTO T30 together with the additional requirements and modifications contained herein.

3.2 The washed aggregate shall be dried to constant weight by oven, microwave oven, or hot plate with one exception. When steel slag is present in the aggregate, a hot plate is to be used to dry the aggregate to constant weight.

3.3 Samples may be dried at temperatures higher than 110+5°C (230+9°F) provided steam escapes without generating pressures sufficient to fracture the particles, and temperatures are not so great as to cause chemical breakdown of the aggregate.

4.0 REPORT

4.1 The results of the sieve analysis shall be reported to one decimal place, except, if a top size sieve is specified as percent passing that part of the gradation is to be rounded and reported to the nearest whole number.

